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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/821,069	03/30/2001	Katsuyuki Suzuki	205279US-3X	5315
22850	7590	11/04/2004	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			PIERCE, WILLIAM M	
			ART UNIT	PAPER NUMBER
			3711	

DATE MAILED: 11/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/821,069

Applicant(s)

SUZUKI ET AL.

Examiner

William M Pierce

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-8,10-12 and 14-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-8,10-12 and 14-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

WILLIAM M. PIERCE
PATENT EXAMINER

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION***Specification***

The abstract of the disclosure is objected to because incorporation of material in the specification by reference to a foreign patent is improper as set forth in the previous office action. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 103

Claims 1, 3-8, 10-12 and 14-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tool and Manufacturing Engineers Handbook in view of Mori and Nomura as set forth in the previous office action and below in response to applicant's remarks.

Response to Arguments

Applicant's arguments filed 12/19/02 have been fully considered but they are not persuasive.

The declaration of Katsuyuki Suzuki has been considered but has failed to overcome the grounds for rejection as set forth below.

In the grounds for rejection it is noted that the Handbook teaches the results of adjusting the core diameter (i.e. chisel edge length as defined in his fig. 9-30) to be from 0.0 D-.50 D in his fig. 9-31 where the variables such as torque and thrust are affected by up to a .25 in core diameter for a ½ inch drill. Applicant's claimed range for his core diameter falls within that range discussed by Handbook and is considered met. Additionally, the "importance of this limitation" is well known on the performance of the

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drill. Well known is that too thin of a core diameter leads to a drill that is less stiff for less precise, durable and smooth cutting drills where as too thick results in poor cutting and high torque and trusts. While the data attached to the Declaration of Katsuyuki Suzuki is noted, it is not considered unexpected. One skilled in the art would have known to adjusted the core diameter on a drill to solve problems and obtain optimal desired performance in the areas of precision, cutting, torque, trust and durability. Held by the Courts is that while a claimed range not being "exactly" taught, applicant is reminded that it has been held that "where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955). Applicant's Declaration is considered evidence of optimum workable ranges in the core diameter of a drill which fails to distinguish over the art of record as set forth it he grounds for rejection above.

Conclusion

This is a RCE of applicant's earlier Application. All claims are drawn to the same invention claimed in the earlier application and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the earlier application. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action in this case. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no, however, event will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication and its merits should be directed to William Pierce at E-mail address bill.pierce@USPTO.gov or at telephone number (703) 308-3551.


Any inquiry not concerning the merits of the case such as **missing papers, copies, status or information** should be directed to Tech Center 3700 Customer Service Center at (703) 306-5648 where the fax number is (703) 308-7957 and the email is Customerservice3700@uspto.gov.

For **official fax** communications to be officially entered in the application the fax number is (703) 305-3579.

For **informal fax** communications the fax number is (703) 308-7769.

Any inquiry of a general nature or relating to the **status** of this application or proceeding can also be directed to the receptionist whose telephone number is (703) 308-1148.

Any inquiry concerning the **drawings** should be directed to the Drafting Division whose telephone number is (703) 305-8335.


WILLIAM M. PIERCE
PRIMARY EXAMINER